

ABSTRACT

A direct conversion quadrature receiver and method are provided according to the invention. The receiver according to one embodiment includes a primary local oscillator (LO) that down-converts a received RF signal to a quadrature intermediate frequency (IF) signal. The receiver further includes a dithering controller responsive to the quadrature IF signal generated by the primary LO. The dithering controller communicates a feedback signal back to the primary LO. The feedback signal controls the primary LO in order to offset down-conversion of the RF signal by the quadrature IF signal. The dithering controller offsets the primary LO from a zero-IF signal in order to reduce a phase and gain error of the quadrature IF signal.